## IN THE CLAIMS

Please cancel claims 1, 5-11, 13-14, 20, and 24-26.

1-11 (Cancelled)

12. (Currently amended) A method for determining a specification guardband for a ~~product~~ processor used in a system comprising the steps of:

a) determining a set of variables representative of system environment, test environment, tester to system offset, and reliability, which affect the specification;

(b) creating a set of distribution models representative of variables that affect said specification, the set comprising models for the system on which the ~~product~~ processor is used;

~~analyzing the set of models with a statistical tool that can work with the distribution models;~~

~~selecting a guardband for said specification based on the statistical analysis and a tolerance target for the~~

~~said specification under analysis;~~

setting up the system environment;

modeling system variables distributions during normal operation;

setting initial system variables;

booting the system at increasing frequencies until the system hangs;

running system applications at ~~the~~ a highest frequency at which the system functions and record such frequency; ~~and~~

changing the initial system variables and performing on new system variables the steps of booting and running applied to the initial system variables;

c) creating a distribution model for the system variables representative of the test environment comprising:

characterizing electrical and mechanical test system parameters that affect the specification under test;

choosing an appropriate distribution model for the test system parameters;

d) creating a distribution model representative of tester to system offset comprising:

inputting tester to system correlation data;

calculating tester to system offset for a set of samples;

choosing an appropriate distribution model for the tester to system offset;

calculating tester to system mean and sigma based on the sample size;

e) creating a reliability wearout distribution model;

f) analyzing all the distribution models with a statistical tool that works with the distribution models; and

g) selecting a guardband for said specification based on the statistical analysis and a tolerance target for the specification under analysis.

13-14 (Cancelled)

15. (Original) The method of claim 12 where system variable distributions are power supply voltage and operating temperature.

16. (Currently amended) The method of claim 12~~3~~ where the step of calculating the tester to system mean and sigma is applied to a different speed sort.

17. (Currently Amended) The method of claim 12~~3~~ where the method of calculating tester to system mean and sigma is applied to a different system.

18. (Currently Amended) The method of claim 12~~4~~ where tester system electrical parameters are tester timing accuracy, clock edge placement accuracy and tester power supply distributions.

19. (Currently Amended) The method of claim 12~~4~~ where tester system mechanical parameters are device under test interface board, tester temperature and tester handler distributions.

20-27 (Cancelled)